

Application No. Not Yet Assigned
Paper Dated: October 8, 2004
In Reply to USPTO Correspondence of N/A
Attorney Docket No. 0115-045239

Customer No. 28289

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AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claims 1-8 (cancelled)

Claim 9 (new): A dual-band antenna comprising a first linear periodic array of first individual antennas for a first frequency band and a second linear periodic array of second individual antennas for a second frequency band, the period of the first linear periodic array being essentially twice as large as the period of the second linear periodic array, the second individual antennas being arranged alternately between the first and above the first individual antennas, and the first individual antennas and second individual antennas being constructed as patch radiators, wherein each first and second individual antennas includes a printed-circuit board arranged in a rectangular, electrically conductive box open to the top and a number of patch plates which are arranged at a distance above one another above the printed-circuit board and in parallel with the printed-circuit board.

Claim 10 (new): The dual-band antenna as claimed in claim 9, wherein the patch plates of each individual antenna are held in each case at a distance above one another and from the printed-circuit board by means of electrically insulating spacing elements.

Claim 11 (new): The dual-band antenna as claimed in claim 9, wherein each second individual antenna includes three patch plates arranged at a distance above one another, and each first individual antenna includes two patch plates arranged a distance above one another with a box of one of the second individual antenna arranged at a distance above the top one of said two patch plates.

Claim 12 (new): The dual-band antenna as claimed in claim 9, wherein the first and second individual antennas are arranged above a common base plate extending in the longitudinal direction of the antenna.

Claim 13 (new): The dual-band antenna as claimed in claim 12, wherein the base plate is constructed as a reflector.

Claim 14 (new): The dual-band antenna as claimed in claim 9, wherein the first individual antennas are designed for covering the frequency range of 806-960 MHz and the second individual antennas are designed for covering the frequency range of 1710-2170 MHz.

Claim 15 (new): The dual-band antenna as claimed in claim 9, wherein a total of N first individual antennas and $2N+1$ second individual antennas are arranged in the dual-band antenna, where $N = \text{integral number} > 0$.

Claim 16 (new): The dual-band antenna as claimed in claim 15, wherein $N = 7$.

Claim 17 (new): The dual-band antenna as claimed in claim 10, wherein each second individual antenna includes three patch plates arranged at a distance above one another, and each first individual antenna includes two patch plates arranged a distance above one another with a box of one of the second individual antenna arranged at a distance above the top one of said two patch plates.

Claim 18 (new): The dual-band antenna as claimed in claim 10, wherein the first and second individual antennas are arranged above a common base plate extending in the longitudinal direction of the antenna.

Claim 19 (new): The dual-band antenna as claimed in claim 11, wherein the first and second individual antennas are arranged above a common base plate extending in the longitudinal direction of the antenna.

Claim 20 (new): The dual-band antenna as claimed in claim 10, wherein the first individual antennas are designed for covering the frequency range of 806-960 MHz and the second individual antennas are designed for covering the frequency range of 1710-2170 MHz.

Claim 21 (new): The dual-band antenna as claimed in claim 11, wherein the first individual antennas are designed for covering the frequency range of 806-960 MHz and the second individual antennas are designed for covering the frequency range of 1710-2170 MHz.

Claim 22 (new): The dual-band antenna as claimed in claim 12, wherein the first individual antennas are designed for covering the frequency range of 806-960 MHz and the second individual antennas are designed for covering the frequency range of 1710-2170 MHz.

Claim 23 (new): The dual-band antenna as claimed in claim 13, wherein the first individual antennas are designed for covering the frequency range of 806-960 MHz and the second individual antennas are designed for covering the frequency range of 1710-2170 MHz.

Claim 24 (new): The dual-band antenna as claimed in claim 10, wherein a total of N first individual antennas and $2N+1$ second individual antennas are arranged in the dual-band antenna, where N = integral number > 0.

Claim 25 (new): The dual-band antenna as claimed in claim 11, wherein a total of N first individual antennas and $2N+1$ second individual antennas are arranged in the dual-band antenna, where N = integral number > 0.

Claim 26 (new): The dual-band antenna as claimed in claim 12, wherein a total of N first individual antennas and $2N+1$ second individual antennas are arranged in the dual-band antenna, where N = integral number > 0.

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Claim 27 (new): The dual-band antenna as claimed in claim 13, wherein a total of N first individual antennas and $2N+1$ second individual antennas are arranged in the dual-band antenna, where N = integral number > 0.

Claim 28 (new): The dual-band antenna as claimed in claim 14, wherein a total of N first individual antennas and $2N+1$ second individual antennas are arranged in the dual-band antenna, where N = integral number > 0.